

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:	REED et al.	)	Examiner:	Diana J. Liao
Application No.:	10/786,621	)	Group Art Unit:	1793
Filed:	February 25, 2004	)	Confirmation No.:	2048
Docket No.	CPM03008 (3600-421-01)	)		

For: PHASE FORMATION OF OXYGEN REDUCED VALVE METAL OXIDES  
AND GRANULATION METHODS

**DECLARATION UNDER 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 18, 2008

Sir:

I, Sridhar Venigalla, do declare and state as follows:

(1) I am currently employed with Cabot Corporation, and have been working in the capacitor valve metal powder area, doing research and product development since 1995.

(2) I have a Doctor of Philosophy degree in Materials Science and Engineering from University of Florida, Gainesville, FL.

(3) I am familiar with the final Office Action dated July 23, 2008, received in the examination of U.S. Patent Application No. 10/786,621. I am also familiar with the cited reference relied upon by the Examiner. I am one of the named inventors of this application.

(4) I have gone back into the records of Cabot Corporation with regard to its research involving niobium suboxides and have obtained samples that have been made in accordance with the Kimmel et al. application, namely U.S. Patent Application Publication No. 2001/0036056 A1. In particular, these niobium suboxide powders were prepared by the method used in Example 1 of Kimmel et al., wherein niobium metal was used as the getter material and the starting niobium oxide

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was  $\text{Nb}_2\text{O}_5$ . These five samples were tested for flow rates and the flow rates are indicated in the table set forth below.

Sample No.	Sample Weight (g)	Flow Time (s)	Flow Rate (mg/s)
1	9.0	70	129
2	35.2	135	261
3	25.3	120	211
4	25.2	129	195
5	14.1	150	94
6	15.0	83	181

(5) As can be seen, the highest flow rate was 261 mg/s. It is my understanding that these flow rates, as set forth in the above Table, are generally the maximum flow rates that were obtained following the methods set forth in Kimmel et al.

(6) The flow rates obtained in the present invention, for which I am an inventor, are significantly better and unexpected from Kimmel et al. Achieving a higher flow rate is an important factor for the formation of capacitor anodes. It was quite surprising that the material and the method of making the material as described in the present application achieved a superior and unexpected flow rate compared to the niobium metal oxides of Kimmel et al.

(7) I hereby declare that all statement made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

12/18/2008  
Date

Sridhar Venigalla  
Sridhar Venigalla